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Matching schools to neighborhoods:

In order to do this, we first stipulated, that any Census block used to construct the neighborhood surrounding a school had to be located within the school's district. We then looked at two different approaches for creating a school's surrounding neighborhood: one based on distance and another based on the school's population size.

Methods to create an associated neighborhood for each school:

Distance/Radius approach

Neighborhood constructed by pulling the set of within-district Census blocks within a certain distance the school. The centroids of Census blocks were used for this distance calculation. This was done using half mile, two mile and five mile radii.

Fill approach

Associated neighborhoods constructed by pulling the nearest within-district Census blocks until the youth population (under age 18) of the "neighborhood" matched a certain multiple of the school enrollment size. This was done for fill ratios of 1, 2, and 5.

Data Supplement File

The Data Supplement File contains the relevant set of school information and associated block information using each of these different calculations

Schl Name: The name of the school Lat: The latitude coordinate of the school Long: The longitude coordinate of the school State_Abbrv: The state (abbreviation) the school is located in County: The county the school is located in CBSA: The CBSA the school is located in District ID: The NCES district ID Total Enrollment: The enrollment of all children Enrollment White: The enrollment of white children Enrollment Black: The enrollment of black children Enrollment_Hisp: The enrollment of Hispanic children Enrollment Asian: The enrollment of Asian children Enrollment_Other: The enrollment of Other children HighGrade: The highest grade the school serves LowGrade: The lowest grade the school serves Schl Pct White: The school's share of white children

Block_Pct_White_twomile: The neighborhood share of white children within a 2-mile radius (within district)

Block_Pct_White_halfmile: The neighborhood share of white children within a half-mile radius (within district)

Block_Pct_White_onemile: The neighborhood share of white children within a one-mile radius (within district)

Block_Pct_White_fivemile: The neighborhood share of white children within a five-mile radius (within district)

Block_Pct_White_fill1: The neighborhood share of white when the "neighborhood" population from the Census blocks roughly equals the school enrollment level

Block_Pct_White_fill2: The neighborhood share of white children when the "neighborhood" population from the Census blocks is roughly equivalent to double the school enrollment level

Block_Pct_White_fill5: The neighborhood share of white children when the "neighborhood" population from the Census blocks is roughly equivalent to five times the school enrollment level

Schl_Pct_Black: The school's share of Black children

Block_Pct_Black_twomile: The neighborhood share of Black children within a 2-mile radius (within district)

Block_Pct_Black_halfmile: The neighborhood share of Black children within a half-mile radius (within district)

Block_Pct_Black_onemile: The neighborhood share of Black children within a one-mile radius (within district)

Block_Pct_Black_fivemile: The neighborhood share of Black children within a five-mile radius (within district)

Block_Pct_Black_fill1: The neighborhood share of Black children when the "neighborhood" population from the Census blocks roughly equals the school enrollment level

Block_Pct_Black_fill2: The neighborhood share of Black children when the "neighborhood" population from the Census blocks is roughly equivalent to double the school enrollment level

Block_Pct_Black_fill5: The neighborhood share of Black children when the "neighborhood" population from the Census blocks is roughly equivalent to five times the school enrollment level

Schl_Pct_Hispanic: The school's share of Hispanic children

Block_Pct_Hispanic_twomile: The neighborhood share of Hispanic children within a 2-mile radius (within district)

Block_Pct_Hispanic_halfmile: The neighborhood share of Hispanic children within a half-mile radius (within district)

Block_Pct_Hispanic_onemile: The neighborhood share of Hispanic children within a one-mile radius (within district)

Block_Pct_Hispanic_fivemile: The neighborhood share of Hispanic children within a five-mile radius (within district)

Block_Pct_Hispanic_fill: The neighborhood share of Hispanic children when the "neighborhood" population from the Census blocks roughly equals the school enrollment level

Block_Pct_Hispanic_fill2: The neighborhood share of Hispanic children when the "neighborhood" population from the Census blocks is roughly equivalent to double the school enrollment level

Block_Pct_Hispanic_fill5: The neighborhood share of Hispanic children when the "neighborhood" population from the Census blocks is roughly equivalent to five times the school enrollment level

Schl_Pct_Asian: The school's share of Asian children

Block_Pct_Asian_twomile: The neighborhood share of Asian children within a 2-mile radius (within district)

Block_Pct_Asian_halfmile: The neighborhood share of Asian children within a half-mile radius (within district)

Block_Pct_Asian_onemile: The neighborhood share of Asian children within a one-mile radius (within district)

Block_Pct_Asian_fivemile: The neighborhood share of Asian children within a five-mile radius (within district)

Block_Pct_Asian_fill1: The neighborhood share of Asian children when the "neighborhood" population from the Census blocks roughly equals the school enrollment level

Block_Pct_Asian_fill2: The neighborhood share of Asian children when the "neighborhood" population from the Census blocks is roughly equivalent to double the school enrollment level

Block_Pct_Asian_fill5: The neighborhood share of Asian children when the "neighborhood" population from the Census blocks is roughly equivalent to five times the school enrollment level

Schl_Pct_Other: The school's share of Other children

Block_Pct_Other_twomile: The neighborhood share of Other children within a 2-mile radius (within district)

Block_Pct_Other_halfmile: The neighborhood share of Other children within a half-mile radius (within district)

Block_Pct_Other_onemile: The neighborhood share of Other children within a one-mile radius (within district)

Block_Pct_Other_fivemile: The neighborhood share of Other children within a five-mile radius (within district)

Block_Pct_Other_fill1: The neighborhood share of Other children when the "neighborhood" population from the Census blocks roughly equals enrollment level

Block_Pct_Other_fill2: The neighborhood share of Other children when the "neighborhood" population from the Census blocks is roughly equivalent to double the school enrollment level

Block_Pct_Other_fill5: The neighborhood share of Other children when the "neighborhood" population from the Census blocks is roughly equivalent to five times the school enrollment level

Charter: Charter school status

Magnet: Magnet school status

School Level: Level of school (elementary, middle, high school, or other)

Imbalance_White: Schl_Pct_White-Block_Pct_White_twomile

Imbalance_Black: Schl_Pct_Black- Block_Pct_Black_twomile

Imbalance_Hispanic: Schl_Pct_Hispanic- Block_Pct_Hispanic_twomile

Imbalance_Asian: Schl_Pct_Asian-Block_Pct_Asian_twomile

Imbalance_Other: Schl_Pct_Other- Block_Pct_Other_twomile

The Process, How the School-Neighborhood Differences are Constructed:

As mentioned in our paper, the construction of the "racial imbalance measure" for every non-private (includes traditional public, charter, and magnet schools) school in the U.S required us to:

- a. Collect data on the racial composition of each school
- b. Match schools to school districts
- c. Define the neighborhood around the school for comparison
- d. Collect data on the racial composition of these neighborhoods
- e. Calculate the racial composition of the school versus neighborhood

What follows are the specific steps of the entire procedure:

i) Cleaning school data

To identify school enrollment and demographics, we used the National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014. Our sample excludes schools with fewer than 25 students¹; non-regular schools (vocational, alternative, and special education schools); virtual schools; schools in states without charter schools; Head Start schools; and schools whose highest grade of enrollment was pre-kindergarten. The total number of schools in our resulting sample is 86,109.

ii) Matching schools to districts

We performed a spatial merge to match individual schools with their school district. This process assigns the school in our initial dataset to a specific district (as outlined in the NCES School District Boundary Shapefiles, School Year 2013-2014) that it sits in. Note that elementary schools are matched to elementary districts, secondary schools are matched to secondary districts and schools that are in localities with unified school systems are matched to unified districts.²

iii) Calculating the Centroids of Census Blocks

To generate a centroid for each census block and then match that centroid to the appropriate school district, we use the National Historical Geographic Information System (NHGIS) Block Boundary Shapefiles, 2010 Census and the NHGIS Census Tract Boundary Shapefiles, 2010 Census. Using ArcGIS we open each of the state-level block polygon shapefiles separately and calculate the centroids (geographic center) of each block and output point shapefiles.

iv) Calculating the School District a Block Sits In

Because we will eventually want to condition on districts when we perform matching between schools and neighborhoods we must establish the associated school district for each Census block. In order to do this, we use the NCES School District Boundary Shapefiles, School Year 2013-2014 and perform a spatial join between our just calculated centroid shapefiles and the district boundary files in R.

v) Creating a centroid-based block demographic file

Because we are ultimately interested the racial composition of each block, we take the file created from step (iv) and use the GISJOIN variable to match the demographic data in the NHGIS Census Block

¹ Using the variable "Total Students All Grades, Excludes Adult Education Learners"

² Note that there are some schools that sit in both elementary and secondary districts but have enrollments that span elementary and secondary grade levels. There were fewer than 1,000 cases of this in our dataset, but we made a best estimate of the appropriate district.

Demographic Data, 2010 Census with the appropriate block as identified by its centroid shapefiles. Once this process is completed, we convert those into tables, saved as separate csv files for each state.

vi) Calculating the overall racial composition of 'neighborhoods'

To generate demographic data, and specifically racial composition, for the neighborhoods surrounding each school, we used the file created in the last step (v). To align with NCES definitions of race, we use the designations of Hispanic, White non-Hispanic, Black non-Hispanic, Asian non-Hispanic, and other non-Hispanic.³ For each neighborhood (amalgamation of Census blocks) the sum of each of these populations under 18 years of age is divided by the total population under 18 years of age in those Census blocks to generate neighborhood totals by race.

Defining Neighborhood and School Matches

To compare schools to their surrounding neighborhoods, we first needed to define the appropriate geographical area for the 'neighborhood'. As initially outlined, we tested two approaches: one based on distance (radius approach) and another based on matching population size (fill approach).⁴ In both cases, we use Census blocks to construct the neighborhood and calculate its racial composition as outlined above. And in both cases, only Census blocks within the school's district were included in the surrounding neighborhood. Our primary measure was the 2 mile radius. Below an example of how this process worked is outlined in detail.

Example: Wedgewood Park School, WI

Here is an example of our approach: Wedgewood Park school in Wisconsin is located in the most residentially racially segregated city in America, Milwaukee. The school served 840 6th-8th graders in the 2013-2014 school year. Located at the latitude-longitude coordinates of (42.9794,-87.9953), we can match the school to the Milwaukee District (NCES ID of 5509600) using ArcGIS. Next, in order to match blocks, we first look only at the blocks sitting in the of the district; this leaves us with 7,664 blocks. Next, we use the distance formula:

$$c = \sqrt{(lat_1 - lat_2)^2 + (lon_1 - lon_2)^2}$$

We take the sum of the absolute value of the difference between the latitude of each block and of the school (42.9794) squared and the absolute value of the difference between the longitude of each block and of the school (-87.9953) squared. For a block to be within 2 miles of the school the square root of this value must be less than 0.03531903777. 499 blocks satisfy this condition and makeup the surrounding neighborhood for Wedgewood Park school.

³ It should be noted that all racial designations are constrained by NCES reporting. NCES statistical standards state that "Aggregated data reported by education institutions about students, faculty, or staff will follow the Department of Education October 2007 final guidance on ethnicity and race data... Per the Department guidance, the institutions will report aggregate data on ethnicity and race of their students, faculty, or staff to the Department of Education using the following categories: Hispanic or Latino, of any race; American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Black, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino; White, not Hispanic or Latino; Two or more races, not Hispanic or Latino." For more information see https://nces.ed.gov/statprog/2002/std1_5.asp.

⁴ Population size calculations for neighborhoods based on the population under age 18 in each Census block.

How Our Measure Differs from Standard Measures of School Segregation:

Four main indices to measure school segregation exist: (a) the exposure index (b) the isolation index (c) the dissimilarity index (d) the divergence index and (e) the Theil index. A quick definition of each is given below (for a more complete description and analysis of each see our previous paper, "Segregation, Race, and Charter Schools: What Do We Know?"):

The exposure index tries to capture the degree to which children of one race come into contact with children of another in the average school they attend. For example, the black-to-white exposure index measures the percentage of white students in the average black student's school.

The isolation index tries to capture the degree of racial clustering in schools. For example, the white-to-white isolation index measures the percentage of white students in the average white student's school.

The dissimilarity index tries to capture the degree of racial mirroring between a geographic area and a school based on a binary racial group categorization. The index runs on a scale from 0 to 1, with the lower the number indicating less segregation.

The divergence index, similar to the dissimilarity index, captures the segregation in schools given the proportions of each racial group in the larger area. The index's maximum value is a function of the proportions of each group in the overall population being considered, but the minimum value is always zero.

The Theil index, can be described as "the difference between the diversity (entropy) of the system and the weighted average diversity of individual units, expressed as a fraction of the total diversity of the system."⁵ The index runs on a scale from 0 to 1, with the lower the number indicating less segregation.

All of these measures suffer from separate and distinct disadvantages. The disadvantage of the exposure and isolation indices is that that they are binary and have no reference to underlying residential segregation by race (the 'compared to what?' question). If we want both to compare the racial demographics of schools *in reference to surrounding areas* and *do so across the full range of racial categories* we need to turn elsewhere. The dissimilarity index solves the former problem but does not solve the latter. The divergence index solves both, but interpreting the metric can be difficult. The Theil index is also technically complex and has a weakness in that it in some ways captures school diversity as much as integration or segregation.

Correlations Between Alternative Matching Methods:

In order to assure readers that our method for matching schools to neighborhoods is does not materially alter our findings we correlate the differences in school and neighborhood representation by method outlined above (all distance and all fill approaches) for each racial group.

Race_diff_half: difference between school and neighborhood using distance approach of half-mile radius

Race_diff_1: difference between school and neighborhood using distance approach of a one-mile radius

Race_diff_2: difference between school and neighborhood using distance approach of a two-mile radius

Race_diff_5: difference between school and neighborhood using distance approach of a five-mile radius

⁵ John Iceland, "The Multigroup Entropy Index" (College Park, MD: University of Maryland, 2004), https://www.census.gov/housing/patterns/about/multigroup_entropy.pdf.

Race_diff_ratio1: difference between school and neighborhood using a fill approach of 1 Race_diff_ratio2: difference between school and neighborhood using a fill approach of 2 Race_diff_ratio5: difference between school and neighborhood using a fill approach of 5



In our main paper, we use the 2 mile radius calculation. We are heartened that the relationship between racial differences between schools and neighborhoods are relatively tightly correlated regardless of which measure we use, with the exception of the 5 mile distance method. With the exception of the 5 mile calculation, all other approaches to measuring racial difference between schools and neighborhoods show correlations at or in excess of +.70.



Furthermore, the 2 mile radius does seem to be tightly correlated with the other methodologies, even for charter schools. With the exception of the 5 mile calculation, all other approaches to measuring racial difference between schools and neighborhoods continue to show correlations at or in excess of +.70 for charter schools.

Supplemental Tables and Figures:

Figure 1: Mean and median imbalance (percentage point difference between the share of a racial group in a school- its share in the matched surrounding neighborhood) by charter status and race



Table 1: Mean and median imbalance by schooling level and charter status

Means	Type of School	Schooling Level	mean_white	mean_black	mean_hispanic	mean_asian	mean_other
	Traditional Public	Primary	-3.4	1.2	1.9	0.4	-0.2
	Charter	Primary	-2.6	6.5	-3.4	-0.2	-0.4
	Traditional Public	Middle	-2.3	1.8	0.8	0.4	-0.7
	Charter	Middle	-4	5.9	-0.1	-0.8	-1
	Traditional Public	High	-0.8	2.1	-0.7	0.4	-1
	Charter	High	-1.3	4.3	-1.2	-1.5	-0.3
	Traditional Public	Other	-0.8	1.8	-0.8	0.2	-0.5
	Charter	Other	1	4.8	-4.6	-0.6	-0.5

Medians	Type of School	Schooling Level	median_white	median_black	median_hispanic	median_asian	median_other
	Traditional Public	Primary	-2	0.1	0.3	0	-0.4
	Charter	Primary	-2.3	0.9	-2.3	-0.4	-0.9
	Traditional Public	Middle	-1.1	0.4	-0.2	0	-0.8
	Charter	Middle	-3.7	1.1	-0.5	-0.5	-1.2
	Traditional Public	High	0.3	0.4	-0.9	0	-1.1
	Charter	High	-2	0.7	-1.6	-0.7	-1.2
	Traditional Public	Other	0	0.1	-0.7	0	-0.8
	Charter	Other	-0.6	0.5	-3.1	-0.3	-0.9

Charter schools: higher variance of imbalance

One of the main findings from our paper is that racial school-neighborhood imbalances vary quite a bit based on locality. The following figures further elaborate on the degree of this variance and the differing distributions of school-neighborhood imbalances between traditional public schools and charters. In Figures 2-4, imbalances are based off of the school's share as compared to the neighborhood's share of any given racial group based on that group's level of neighborhood prevalence (supermajority, majority, plurality). Figures 5-7 simply look at imbalances based on which racial group is most prevalent, of varying degrees, in the neighborhood. We used the violin plots as our graphing technique in order to show the density of varying degrees of racial imbalance scores by charter status (the wider the width of the teardrop at any given imbalance score, noted on the y-axis, the greater the share of schools with that score).

Figure 2: The distribution of school-neighborhood imbalance of most prevalent neighborhood racial group (when that group makes up more than 75% of the under 18 years of age neighborhood population) by charter status



Figure 3: The distribution of school-neighborhood imbalance of most prevalent neighborhood racial group (when that group makes up between 50%-60% of the under 18 years of age neighborhood population) by charter status



Figure 4: The distribution of school-neighborhood imbalances of most prevalent neighborhood racial group (when that group makes up less than 50% of the under 18 years of age neighborhood population) by charter status



Figure 5: The distribution of white school-neighborhood imbalances, neighborhoods where whites most populous, by charter status



Figure 6: The distribution of black school-neighborhood imbalances, neighborhoods where blacks most populous, by charter status



Figure 7: The distribution of Hispanic school-neighborhood imbalances, neighborhoods where Hispanics most populous, by charter status



Alternative outlier definitions

As stated in our paper, our outlier definitions are based on calculating within-state interquartile ranges (IQR) and then defining as low outliers those schools that fall significantly (as defined by that IQR statistic) below or above the bottom or top quartiles respectively. We believe this to be a reasonable definition of an outlier and yields around 8%, 15%, and 11% of schools with markedly abnormal levels of white, black, and Hispanic school-neighborhood imbalances, respectively.

As such, there are several notes of caution to be aware of when looking at outliers as described in the interactive map and main paper:

- 1. The difference between a school's and neighborhood's racial concentration that qualifies a school to be an outlier is based on *state level* distributions
- 2. We cannot assign normative judgements to the degree to which a school is improving or worsening the racial balance of a school based on outlier status: for example, a school that has a student population that is 30% African American and an associated neighborhood that is 10% African American will show up as a +20 on our difference. A school that has a student population that is 80% African American and an associated neighborhood that is 60% African American will record the same +20 difference.
- 3. Outliers may be driven not only by student assignment to schools outside of a given distance or fill ratio, but also by parents sending students to private schools (which is not captured in the public school enrollment data, but would be counted in terms of the census block under 18 years of age population used to construct neighborhood racial demographics)

However, there may be rationales for differing definitions of outliers. Here we show a few different methodologies and demonstrate that our estimation neither under-selects nor over selects according to reasonable benchmarks.⁶

- 1. State adjusted IQR method: this calculation takes the interquartile range for each state (the difference between the 3rd quartile and the 1st quartile) and subtracts it from the bottom quartile to determine low outliers and adds it to the top quartile to determine high outliers for schools in a given state
- 2. National IQR method: this calculation takes the interquartile range (the difference between the 3rd quartile and the 1st quartile) and subtracts it from the bottom quartile to determine low outliers and adds it to the top quartile to determine high outliers
- 3. +/-15: high outliers are defined as where the schools share of any particular race is 15 percentage points higher than the neighborhood share of that same race.
- 4. +/-20: high outliers are defined as where the schools share of any particular race is 20 percentage points higher than the neighborhood share of that same race.
- 5. +/-25: high outliers are defined as where the schools share of any particular race is 25 percentage points higher than the neighborhood share of that same race.

	High/low	High/low	High/low	High/low	High/low
	outliers white	outliers black	outliers	outliers Asian	outliers other
			Hispanic		
State	3/5	10/5	7/4	2/1	4/2
adjusted IQR					
National IQR	3/5.1	13.4/7.4	8.9/5.4	9.6/6.9	4.1/2.5
+/-15	3.5/9.7	6.3/2.2	5.8/3	1.1/0.4	0.6/0.2
+/-20	2/5.6	4.1/1.3	3.5/1.8	0.6/0.2	0.3/0.1
+/-25	1.2/3.4	2.7/0.7	2.2/1.1	0.4/0.1	0.2/0

Charter School Determinants of Imbalance

In our analysis, we look at the 5,318 public charter entities that report enrollments of less than 1,000 students. The reasoning for stipulating this condition in our more detailed analysis of racial imbalances among charter schools is due to a data constraint: the 263 authorizing charter entities with school populations of over 1,000 students are often not single schools but several campuses and buildings aggregated into a single record by NCES.⁷ Furthermore, we know that the lion's-share of public charter schools, approximately 95%, had enrollments below 1,000 in the Fall of 2014, with 50% serving less than 300 students, making those mega-charter schools a highly selective and unrepresentative group. We have run the numbers both ways, with little sensitivity of these metrics to the inclusion or exclusion of charter entities documenting over 1,000 student enrollment.

1. Large urban areas

Charter schools in big core based statistical areas (CBSAs) exhibit different patterns of racial imbalance than those that are not. We define big CBSAs as the 100 largest core based statistical areas (areas consisting of one or more counties (or equivalents) anchored by an urban center of at least 10,000 people).

⁶ Note that our state-adjustment shifts outlier thresholds based on geography and that some may dispute whether this is too accommodating to state-based patterns in school segregation. However, the adjustment does not seem to lead to more or fewer schools selected as outliers.

⁷ This poses problems for our neighborhood matching approach among such schools as well, but is a small minority (approximately 5%) of charter schools in our data.



Source: Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014

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2. Urbanicity: City, Suburban, Town, Rural⁸

NCES also reports degrees or urbanicity of school locations. For charter schools in each type of locale, we generated average imbalance scores across each racial category. In the most urban areas, blacks are the most likely to be overrepresented in the charter school sector, whereas in towns near urbanized areas, whites are most likely to be overrepresented in the sector.

⁸ Formal definitions are as follows: City, Large: Territory inside an urbanized area and inside a principal city with population of 250,000 or more. City, Mid-size: Territory inside an urbanized area and inside a principal city with a population less than 250,000 and greater than or equal to 100,000.City, Small: Territory inside an urbanized area and inside a principal city with a population less than 100,000.Suburb, Large: Territory outside a principal city and inside an urbanized area with population of 250,000 or more. Suburb, Mid-size: Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.Suburb, Small: Territory outside a principal city and inside an urbanized area with a population less than 250,000 and greater than or equal to 100,000.Suburb, Small: Territory outside a principal city and inside an urbanized area with a population less than 100,000. Town, Fringe: Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area. Town, Distant: Territory inside an urban cluster that is more than 35 miles from an urbanized area. Town, Remote: Territory inside an urbanized area, as well as rural territory that is less than or equal to 5 miles from an urbanized area. Rural, Fringe: Census-defined rural territory that is less than or equal to 2.5 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 25 miles from an urban cluster. Rural, Remote: Census-defined rural territory that is more than 2.5 miles to 10 miles from an urban cluster. Rural, Remote: Census-defined rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.



Charter school (enrollment<1000) racial imbalance by urbanicity

3. School level: Primary, Middle, or High School

Regardless of which level of educational instruction charter schools aim to provide, imbalances persist.



Source: Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014

4. School size

No clear relationship emerges on any imbalance measure and the size of a charter school, all correlations are below 0.2 in absolute magnitude.



School total enrollment

Source: Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014 Note that this graph does not include the 263 authorizing entities recorded school populations of over 1,000 students. Such entities are often not single schools but several campuses and buildings aggregated into a single record by NCES.



School total enrollment Source: Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014

Note that this graph does not include the 263 authorizing entities recorded school populations of over 1,000 students. Such entities are often not single schools but several campuses and buildings aggregated into a single record by NCES.

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Hispanic imbalance measure among charters by school size



School total enrollment

Source: Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014 Note that this graph does not include the 263 authorizing entities recorded school populations of over 1,000 students. Such entities are often not single schools but several campuses and buildings aggregated into a single record by NCES.

5. State charter school law

Each state can have very different laws on the books, including caps on charter school growth, who has authorization to run start and run public charter schools, funding levels offered to public charter schools, monitoring and data collection processes, and clarity of student enrollment procedures. Each year, the National Alliance for Public Charter Schools scores states on the degree to which each state's laws regarding public charter schools align with its 2010 model law on these metrics.⁹ The table below lists the ranking and score of charter public school laws by state and the average imbalance measures among charter schools. The correlations between state score of charter law and imbalance scores are very small and not statistically significant, e.g., .076 for black imbalance. Our findings do not provide evidence that state charter laws are influencing racial balances between schools and neighborhoods.

2012 ranking	State	2012 Score	Average white imbalance score among charters	Average black imbalance score among charters	Average Hispanic imbalance score among charters
1	Minnesota	172	-6%	10%	-1%
2	Maine	166	8%	-4%	-1%
3	Washington	161	9%	-1%	-6%
4	Colorado	160	0%	1%	-1%
5	Florida	151	-2%	0%	2%
6	Louisiana	151	-3%	4%	0%
7	California	150	2%	3%	-3%
8	New York	148	-13%	22%	-5%
9	Indiana	148	-8%	10%	-1%
10	New Mexico	147	9%	1%	-9%
11	Massachusetts	145	-7%	11%	1%
12	South Carolina	141	6%	-2%	-4%
13	Arizona	141	1%	2%	-4%
14	Hawaii	139	12%	1%	-8%
15	Michigan	138	-9%	13%	-1%
16	Georgia	135	-2%	4%	-4%
17	District of Columbia	134	-4%	9%	-2%
18	Missouri	132	-12%	11%	3%
19	Pennsylvania	131	-10%	15%	-3%
20	Utah	131	5%	0%	-5%
21	Delaware	127	2%	11%	-11%
22	Nevada	126	12%	8%	-21%

⁹ For more information on all of the factors that go into the score and the 2010 model charter law see "Measuring Up to the Model: A Ranking of State Charter Laws." 2013. National Alliance for Public Charter Schools. Available at

https://www.minnpost.com/sites/default/files/attachments/NAPCS_2013-Model-Law-Rankings_20130123T175438.pdf.

23	North Carolina	125	7%	2%	-9%
24	Texas	124	-1%	5%	-4%
25	Arkansas	122	2%	0%	-3%
26	Oregon	120	5%	0%	-6%
27	Ohio	117	-10%	12%	-1%
28	Illinois	117	-8%	18%	-10%
29	New Jersey	114	-6%	14%	-7%
30	New Hampshire	113	6%	-1%	-4%
31	Connecticut	110	-5%	18%	-9%
32	Idaho	110	10%	0%	-10%
33	Tennessee	109	-12%	16%	0%
34	Oklahoma	109	-11%	10%	4%
35	Rhode Island	108	-7%	4%	7%
36	Wyoming	87	0%	3%	-4%
37	Wisconsin	77	3%	3%	-2%
38	Iowa	71	-21%	12%	1%
39	Virginia	69	13%	-8%	-2%
40	Kansas	63	8%	2%	-9%
41	Alaska	63	7%	-1%	-4%
42	Maryland	42	1%	3%	-3%
43	Mississippi	39	-	-	-

6. Degree of geographical proximity to other public schools

Recently, more attention has been given to <u>what impact charter schools may have on traditional</u> <u>public schools</u>. While most of the attention has been focused on the impact of charters on school <u>performance among children that remain in the traditional public school district</u>, it is conceivable that the availability of charter options may also alter the demographic and racial mix of student bodies that both remain in traditional public schools and that utilize the alternative charter system. In order to explore this question, we take a look at average charter school imbalance scores in large core based statistical areas that vary in terms of the degree to which charter schools are located geographically close to a comparable traditional public or other charter school.¹⁰

While this must be interpreted with caution, a clear pattern emerges. Charters located in big CBSAs where they conceivably serve as an alternative to traditional public schools (as measured by the share of a CBSA's charter schools located within one mile of a traditional public school) have more pronounced levels of racial imbalances. The correlations between the availability of charter schools as an alternative to traditional public schools in a large CBSA and the charter school white, black, and Hispanic imbalance scores were -0.29, 0.40, and 0.025. Another way to describe this, for example, is that as the proportion of charter schools in a CBSA that are

¹⁰ The method adopted to measure the availability of charter schools calculates the share of a CBSA's charter schools that have a within-state within-CBSA traditional public school of the same schooling level (elementary, middle, high school) located within a mile of its location. The method adopted to measure the competition among charter schools calculates the share of a CBSA's charter schools that have a within-state within-CBSA other charter school of the same schooling level (elementary, middle, high school) located within a mile of its location. Additionally, note that this analysis was also performed without the 263 mega-charter schools (enrollment of 1,000 students or more) for which the prospect of several campuses or buildings poses a problem.

geographically proximate to traditional public schools goes up, so too does the overrepresentation of black students.

This is likely to reflect, in part, population density. Charter schools that have traditional schools nearby are within recruiting distance of more families than charter schools that are more geographically distant from traditional public schools because they are located in less dense areas of population. As we indicated previously, schools can only differ substantially from the racial makeup of their immediate neighborhood if they are schools of choice that can recruit from beyond their immediate neighborhood. A dense population allows more such out-of-neighborhood recruiting because more out-of-neighborhood families are close by.



Source: : Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014

BROOKINGS

the School Year 2013-2014 Note: values where share is zero removed from graph

Furthermore, the proportion of other charter schools that have at least one other charter school within a one mile radius has a similar set of correlations to the ones just described for the share of charters within close geographical proximity to a traditional public school. The correlations between the charter school proximity to another charter school in a big CBSA and the charter school white, black, and Hispanic imbalance scores are -0.34, 0.43, and 0.016 respectively.¹¹ It is worth noting that 28 out of the 96 big CBSAs with a charter school presence do not have any charter schools with another equivalent charter school nearby.

¹¹ This calculation does not include CBSAs for which all charter schools in its boundaries have no other charter school located within one mile.



Source: : Authors' analysis of National Center for Education Statistics (NCES) Common Core Data (CCD) for the School Year 2013-2014

Note: values where share is zero removed from graph

• Mean white imbalance measure among the CBSA's charter schools

 Mean black imbalance measure among the CBSA's charter schools

 Mean hispanic imbalance measure among the CBSA's charter schools

Drawing District Boundaries

In some areas the fact that we construct neighborhoods only from Census blocks that are within the district boundaries of an associated school makes a difference in our imbalance scores. Below we show average imbalance scores across all racial groups for schools in any given district in Long Island, NY and Camden and Burlington counties, NJ when the matched neighborhood must construct only of blocks within a school's district boundary (our standard approach) versus matching to all the blocks within two-miles, regardless of district boundary designations.

While the average school in New York has a white, black and Hispanic imbalance score of -5.3%, +3.8%, and +2.2%, respectively, dropping the within-district condition shifts the averages to -4.9%, +3.5%, and +2%. These differences are minor. Nassau and Suffolk counties (that cover Long Island) exhibit slightly larger shifts in imbalance scores when shifting between dropping versus keeping Census blocks that are not within district. On Long Island, the imbalance scores for white, black, and Hispanics change from -3.8%, 0.7%, and 2.9% in our standard condition to -2%, -0.2%, and +2.4%, respectively, when we pull in blocks regardless of district.

District	District Name	White Di	fference	Black Dif	ference	Hispanic Difference	
ID		With district condition	Without district condition	With district condition	Without district condition	With district condition	Without district condition
3617160	LEVITTOWN UNION FREE SCHOOL DISTRICT	-2.0	-0.6	0.0	-0.4	1.6	2.6
3627060	SMITHTOWN CENTRAL SCHOOL DISTRICT	1.6	2.9	-0.1	-0.4	-1.2	-1.7
3604110	BAYPORT-BLUE POINT UNION FREE SCHOOL DISTRICT	2.8	9.0	-0.1	-1.0	-2.4	-7.3
3616830	LAWRENCE UNION FREE SCHOOL DISTRICT	-49.5	-24.9	15.0	-6.9	32.5	30.2
3614130	ACADEMY CHARTER SCHOOL	0.4	-20.1	-8.0	-1.6	9.6	25.1
3602880	AMAGANSETT UNION FREE SCHOOL DISTRICT	-8.5	16.5	-0.5	-2.5	5.1	-17.1
3610980	FARMINGDALE UNION FREE SCHOOL DISTRICT	-4.9	-0.5	1.3	-4.6	4.0	4.2
3617380	LINDENHURST UNION FREE SCHOOL DISTRICT	-0.3	11.5	0.2	-5.6	1.0	-4.7
3614130	HEMPSTEAD UNION FREE SCHOOL DISTRICT	0.4	-20.1	-8.0	-1.6	9.6	25.1
3626840	SHOREHAM- WADING RIVER CENTRAL SCHOOL DISTRICT	2.0	4.1	-0.3	-0.7	-1.2	-2.9
3624690	RIVERHEAD CENTRAL SCHOOL DISTRICT	-3.5	-3.5	-1.0	-1.0	6.7	6.7

TABLE A: Long Island, NY

3602940	AMITYVILLE	-16.3	-38.4	4.7	23.8	13.5	15.7
	SCHOOL DISTRICT						
3611550	FREEPORT UNION FREE SCHOOL DISTRICT	-4.4	-18.4	-4.8	-6.8	9.5	26.5
3606870	CENTRAL ISLIP UNION FREE SCHOOL DISTRICT	-2.9	-15.2	-1.6	3.6	9.3	16.4
3619410	MILLER PLACE UNION FREE SCHOOL DISTRICT	2.7	4.4	0.0	-0.1	-1.9	-2.6
3628200	THREE VILLAGE CENTRAL SCHOOL DISTRICT	2.9	4.0	0.1	-0.2	-2.8	-4.7
3603720	BABYLON UNION FREE SCHOOL DISTRICT	0.9	2.0	0.6	0.5	-0.4	-2.5
3603840	BALDWIN UNION FREE SCHOOL DISTRICT	-12.6	-18.1	9.1	19.2	5.9	-2.2
3609840	EAST MEADOW UNION FREE SCHOOL DISTRICT	-2.4	7.1	0.0	-7.5	1.5	-5.3
3617700	LOCUST VALLEY CENTRAL SCHOOL DISTRICT	-4.3	-0.8	0.0	-0.2	3.5	1.5
3622470	PATCHOGUE- MEDFORD UNION FREE SCHOOL DISTRICT	-8.1	-10.2	0.4	-0.3	8.0	11.3
3604080	BAY SHORE UNION FREE SCHOOL DISTRICT	-3.0	-5.0	-0.2	4.1	4.1	1.0
3630690	WEST ISLIP UNION FREE SCHOOL DISTRICT	-1.2	7.8	-0.2	-3.7	0.8	-3.1
3628560	SYOSSET CENTRAL SCHOOL DISTRICT	-2.6	-4.2	-0.9	-0.7	-1.4	-2.4
3618630	MASSAPEQUA UNION FREE SCHOOL DISTRICT	3.3	16.0	0.0	-6.6	-2.6	-7.6
3600008	SOUTH COUNTRY CENTRAL SCHOOL DISTRICT	2.4	1.7	-2.9	-2.4	3.1	3.4
3621270	NORTHPORT-EAST NORTHPORT UNION FREE SCHOOL DISTRICT	0.3	0.8	0.0	-0.1	-0.6	-0.2
3620910	NORTH BABYLON UNION FREE SCHOOL DISTRICT	-9.8	-12.9	6.7	7.9	3.2	4.7
3619200	MIDDLE COUNTRY CENTRAL SCHOOL DISTRICT	2.3	0.6	-0.3	-0.2	-1.8	0.2
3604740	BETHPAGE UNION FREE SCHOOL DISTRICT	-2.7	0.2	-0.3	-0.2	2.7	2.3
3627300	SOUTH HUNTINGTON	-6.6	-4.2	1.7	0.4	5.7	4.3

	UNION FREE SCHOOL DISTRICT						
3615780	BROOKHAVEN- COMSEWOGUE UNION FREE SCHOOL DISTRICT	-2.3	-3.0	-0.9	-1.4	3.5	6.4
3613980	HAUPPAUGE UNION FREE SCHOOL DISTRICT	3.3	24.8	0.4	-4.7	-2.2	-20.6
3605280	BRENTWOOD UNION FREE SCHOOL DISTRICT	-3.8	-12.3	-2.2	-2.4	8.4	17.6
3605370	BRIDGEHAMPTON UNION FREE SCHOOL DISTRICT	-33.0	-38.9	14.6	20.4	14.4	17.1
3614340	HICKSVILLE UNION FREE SCHOOL DISTRICT	-12.5	-18.2	0.4	-1.2	5.9	8.9
3608130	COMMACK UNION FREE SCHOOL DISTRICT	-0.6	1.7	-0.2	-0.7	0.0	-2.1
3629280	UNIONDALE UNION FREE SCHOOL DISTRICT	-2.5	-19.1	-4.5	6.9	9.2	16.1
3619230	LONGWOOD CENTRAL SCHOOL DISTRICT	-2.4	-4.6	1.0	2.1	2.6	3.3
3613290	HALF HOLLOW HILLS CENTRAL SCHOOL DISTRICT	-9.1	-7.7	4.8	4.0	2.1	-0.3
3615810	JERICHO UNION FREE SCHOOL DISTRICT	-8.3	3.5	-0.1	-5.2	-1.3	-14.6
3623580	PORT WASHINGTON UNION FREE SCHOOL DISTRICT	-4.4	-6.9	-0.7	-0.3	4.2	6.0
3606540	CARLE PLACE UNION FREE SCHOOL DISTRICT	0.0	20.2	0.3	-7.7	0.2	-11.6
3614280	HERRICKS UNION FREE SCHOOL DISTRICT	-9.1	-23.1	-0.1	-0.9	-0.4	-4.2
3624990	ROOSEVELT UNION FREE SCHOOL DISTRICT	-0.2	-21.5	7.4	27.6	-3.5	-0.4
3625350	SACHEM CENTRAL SCHOOL DISTRICT	0.7	2.7	0.4	-0.2	-1.8	-3.0
3606840	CENTER MORICHES UNION FREE SCHOOL DISTRICT	0.0	4.7	2.4	0.1	-1.9	-3.1
3609960	EAST ROCKAWAY UNION FREE SCHOOL DISTRICT	-10.4	-1.0	1.1	-5.0	7.0	6.3
3623190	PLAINEDGE UNION FREE SCHOOL DISTRICT	3.5	7.5	-0.1	-0.4	-2.8	-5.2

3608160	CONNETQUOT	1.1	2.2	0.1	-0.4	-1.8	-2.0
	CENTRAL SCHOOL						
	DISTRICT						
3629760	CHILD	-19.4	-23.2	-1.6	3.8	22.4	21.0
	DEVELOPMENT						
	CENTER OF THE						
	HAMPTONS						
	CHARTER SCHOOL						
3625920	SAYVILLE UNION	2.1	3.7	-0.5	-0.5	-1.2	-2.5
	FREE SCHOOL						
	DISTRICT			-			
3630660	WEST HEMPSTEAD	-23.7	-20.3	6.0	2.5	15.4	14.9
	UNION FREE						
	SCHOOL DISTRICT						
3608010	COLD SPRING	0.6	4.0	-0.1	-0.9	-1.1	-1.8
	HARBOR CENTRAL						
- (SCHOOL DISTRICT						6.5
3609720	EAST ISLIP UNION	-5.3	10.1	0.5	-4.1	4.2	-6.0
	FREE SCHOOL						
0609010		10.0	26.2	26		10.4	00.0
3008310	EDEE SCHOOL	-13.0	-20.3	2.0	4.0	12.4	23.8
	DISTRICT						
2615540	ISLIP UNION FREE	-5.8	17.0	16	-4.0	4.9	-12.0
3013340	SCHOOL DISTRICT	-5.0	1/.9	1.0	-4.9	4.3	-13.0
	beneou District						
3612180	GLEN COVE CITY	-13.3	-23.8	1.5	3.6	13.8	21.6
0	SCHOOL DISTRICT	-0.0	_0.0	0	0.0	-0.0	
3618210	MALVERNE UNION	-17.8	-41.7	17.9	42.1	2.7	2.9
-	FREE SCHOOL	-					-
	DISTRICT						
3600125	EASTPORT-SOUTH	8.2	13.5	0.0	-1.2	-6.5	-9.2
	MANOR CSD						
3608880	DEER PARK UNION	-8.1	2.8	3.7	-7.2	2.6	2.0
	FREE SCHOOL						
	DISTRICT						
3630960	WESTBURY UNION	-5.7	-29.6	-2.1	9.2	12.0	30.7
	FREE SCHOOL						
	DISTRICT						
3623490	PORT JEFFERSON	2.7	7.7	-1.0	-1.1	-1.7	-7.1
	UNION FREE						
	SCHOOL DISTRICT	0.4			(
3612510	GREAT NECK	-8.1	-2.2	0.2	-0.6	1.5	-0.2
	SCHOOL DISTRICT						
2625050	POSLVN UNION	-0.1	2.0	0.2	17	-0.2	-0.1
3025050	FREE SCHOOL	-0.1	2.9	0.3	1./	-0.2	-0.1
	DISTRICT						
2600660	EAST HAMPTON	-5.2	-5.6	0.4	0.5	4.8	5.0
3009000	UNION FREE	5.5	5.0	0.4	0.0	4.0	0.0
	SCHOOL DISTRICT						
3609870	EAST MORICHES	-0.9	3.0	0.1	-0.5	1.5	-1.7
5	UNION FREE		J				- /
	SCHOOL DISTRICT						
3609900	EAST QUOGUE	-4.5	-1.9	1.6	1.9	5.0	2.2
	UNION FREE					Ĩ	
	SCHOOL DISTRICT						
3617730	LONG BEACH CITY	-2.3	-5.7	1.4	4.2	2.5	2.2
	SCHOOL DISTRICT						

3610680	ELWOOD UNION	-5.0	-8.0	1.7	2.8	2.4	3.4
-	FREE SCHOOL	-				-	
	DISTRICT						
3614130	EVERGREEN	0.4	-20.1	-8.0	-1.6	9.6	25.1
0-10-	CHARTER SCHOOL						0.
3629850	WANTAGH UNION	0.1	6.4	-0.1	-0.8	-0.6	-3.8
<u>je</u> jeje	FREE SCHOOL	011	0.7	011	0.0	0.0	0.0
	DISTRICT						
2615000	HUNTINGTON	-12.0	-17.0	0.4	16	14.0	17.0
3013090	UNION EPEE	13.9	1/.9	0.4	1.0	14.0	1/.3
	SCHOOL DISTRICT						
0611100	EIGHERS ISLAND	0.9	0.9	0.0	0.0	0.9	0.9
3011100	FISHERS ISLAND	-2.0	-2.6	0.0	0.0	2.0	2.0
	UNION FREE						
	SCHOOL DISTRICT		-	-			
3630540	WEST BABYLON	-5.0	1.5	1.1	-4.1	3.5	1.9
	UNION FREE						
	SCHOOL DISTRICT						
3631710	HEWLETT-	-12.3	12.3	3.2	-14.0	5.2	-1.3
	WOODMERE						
	UNION FREE						
	SCHOOL DISTRICT						
3624840	ROCKY POINT	2.5	2.6	-0.4	-0.6	-1.0	-0.8
	UNION FREE						
	SCHOOL DISTRICT						
3616260	KINGS PARK	3.4	3.0	-0.1	-0.1	-2.1	-1.4
0	CENTRAL SCHOOL	.	0				
	DISTRICT						
3615/180	ISLAND PARK	-0.6	-5.2	18	-20	0.6	10.2
3013400	UNION FREE	0.0	5	110	,	0.0	10.
	SCHOOL DISTRICT						
2611760	GARDEN CITY	27	44.6	0.0	-12 5	-2.0	-22.7
3011/00	UNION FREE	3.7	44.0	0.0	13.3	2.9	22.7
	SCHOOL DISTRICT						
2626270	NORTH SHORE	16	01.0	-1.0	-4.4	-0.6	-16.2
30203/0	CENTRAL SCHOOL	1.0	21.3	-1,2	-4.4	-0.0	-10.2
	DISTRICT						
0600940		10.6	10.1	0.1	10.0	5.0	0.0
3003840	UNIONDALE UNION EREE	-12.0	-10.1	9.1	19.2	5.9	-2.2
	CITON FREE						
	SCHOOL DISTRICT		0.5		- 0		
3612840	GREENPORT	-0.9	-8.3	1.4	2.8	1.0	7.0
	UNION FREE						
	SCHOOL DISTRICT						
3623220	PLAINVIEW-OLD	-3.1	1.7	0.0	-0.5	0.3	-2.0
	BETHPAGE						
	CENTRAL SCHOOL						
	DISTRICT						
3613530	HAMPTON BAYS	-9.3	-8.9	0.0	0.1	11.4	11.0
	UNION FREE						
	SCHOOL DISTRICT						
3613620	HARBORFIELDS	-1.3	5.3	-0.1	-1.6	1.7	-3.2
	CENTRAL SCHOOL						
	DISTRICT						
3619500	MINEOLA UNION	-5.9	-1.4	0.6	-0.7	4.7	10.5
	FREE SCHOOL						
	DISTRICT						
3624780	ROCKVILLE	-4.6	28.6	1.3	-17.0	3.3	-10.4
	CENTRE UNION	-		-			
	FREE SCHOOL						
	DISTRICT						
2615510	ISLAND TREES	0.0	-0.0	0.6	0.5	-1.2	10
3013310	UNION FREE	0.0	0.9	0.0	0.0	1.4	1.0
	SCHOOL DISTRICT						
1		1	1	1	1	1	

3618690	WILLIAM FLOYD UNION FREE	0.3	-2.1	2.9	3.7	-1.3	-0.1
	SCHOOL DISTRICT						
3617910	LYNBROOK UNION FREE SCHOOL DISTRICT	-0.8	15.1	0.3	-8.2	0.3	-3.5
3631800	WYANDANCH UNION FREE	-2.3	-38.6	-4.3	24.8	10.2	20.5
3618270	MANHASSET UNION FREE	-3.5	4.9	0.5	1.0	0.1	-1.3
	SCHOOL DISTRICT						
3600021	MATTITUCK- CUTCHOGUE UNION FREE SCHOOL DISTRICT	1.3	1.7	1.6	1.5	-0.6	-1.1
3619710	MONTAUK UNION FREE SCHOOL DISTRICT	-14.9	-14.9	0.5	0.5	11.5	11.5
3620040	MOUNT SINAI UNION FREE SCHOOL DISTRICT	3.5	6.5	-0.1	0.0	-2.1	-5.4
3610050	EAST WILLISTON UNION FREE SCHOOL DISTRICT	-9.4	-0.8	0.2	-1.5	-1.8	-7.4
3622290	OYSTER BAY-EAST NORWICH CENTRAL SCHOOL DISTRICT	-3.9	-5.3	0.9	1.0	3.3	5.3
3621930	OYSTERPONDS UNION FREE SCHOOL DISTRICT	-1.9	-1.9	-1.0	-1.0	4.9	4.9
3625380	SAG HARBOR UNION FREE SCHOOL DISTRICT	-1.0	1.6	-0.6	-0.9	4.0	2.3
3624060	QUOGUE UNION FREE SCHOOL DISTRICT	8.7	14.3	1.9	-1.0	-5.6	-9.5
3624420	REMSENBURG- SPEONK UNION FREE SCHOOL DISTRICT	4.1	0.1	2.5	3.1	-3.7	-0.4
3624690	RIVERHEAD CHARTER SCHOOL	-3.5	-3.5	-1.0	-1.0	6.7	6.7
3624990	ROOSEVELT CHILDREN'S ACADEMY CHARTER SCHOOL	-0.2	-21.5	7.4	27.6	-3.5	-0.4
3626400	SEAFORD UNION FREE SCHOOL DISTRICT	3.3	3.1	0.2	0.2	-1.9	-2.2
3621570	OCEANSIDE UNION FREE SCHOOL DISTRICT	-8.9	4.7	3.5	-5.3	5.2	1.5
3626640	SHELTER ISLAND UNION FREE SCHOOL DISTRICT	-2.5	-2.5	-1.3	-1.3	4.2	4.2
3627620	SOUTHOLD UNION FREE SCHOOL DISTRICT	-2.9	-2.9	0.0	0.0	3.4	3.4

3627540	SOUTHAMPTON UNION FREE	-6.7	-7.0	-4.3	-4.2	3.9	4.4
	SCHOOL DISTRICT						
3627900	SPRINGS UNION FREE SCHOOL DISTRICT	-6.5	-4.4	0.2	0.1	7.9	5.8
3629070	TUCKAHOE COMMON SCHOOL DISTRICT	-28.9	-14.5	0.6	-3.3	34.2	31.4
3631020	WESTHAMPTON BEACH UNION FREE SCHOOL DISTRICT	-1.4	-1.4	0.1	0.1	1.9	1.9
3610620	ELMONT UNION FREE SCHOOL DISTRICT	-2.6	-16.3	-0.8	8.4	1.8	8.0
3626520	SEWANHAKA CENTRAL HIGH SCHOOL DISTRICT	-4.7	-1.8	7.3	4.9	-2.4	-0.2
3611160	FLORAL PARK- BELLEROSE UNION FREE SCHOOL DISTRICT	-1.4	41.9	0.9	-22.9	-1.5	-5.4
3620400	NEW HYDE PARK- GARDEN CITY PARK UNION FREE SCHOOL DISTRICT	-7.5	-15.0	-0.3	-1.6	3.4	5.1
3611460	FRANKLIN SQUARE UNION FREE SCHOOL DISTRICT	-2.8	16.4	0.2	-12.4	1.3	-1.5
3629460	VALLEY STREAM 24 UNION FREE SCHOOL DISTRICT	-10.5	-18.0	6.4	-3.2	5.4	18.9
3629490	VALLEY STREAM 30 UNION FREE SCHOOL DISTRICT	-5.9	-19.1	0.7	-9.4	1.3	12.9
3629430	VALLEY STREAM 13 UNION FREE SCHOOL DISTRICT	-5.9	-3.2	2.1	-2.9	4.3	3.7
3619110	MERRICK UNION FREE SCHOOL DISTRICT	1.1	30.3	0.2	-12.3	-2.8	-18.6
3621120	NORTH MERRICK UNION FREE SCHOOL DISTRICT	-1.0	33.0	0.6	-18.0	0.1	-14.9
3619020	BELLMORE- MERRICK CENTRAL HIGH SCHOOL DISTRICT	4.2	18.5	0.3	-7.4	-3.6	-10.5
3620940	NORTH BELLMORE UNION FREE SCHOOL DISTRICT	-1.6	1.3	-0.1	-1.4	0.3	-1.1
3629520	VALLEY STREAM CENTRAL HIGH SCHOOL DISTRICT	-8.8	-14.4	8.9	2.7	0.4	6.5
3604410	BELLMORE UNION FREE SCHOOL DISTRICT	1.1	0.4	0.1	0.0	-0.2	-0.4

In the case of New Jersey, the district condition makes some difference in the average school. The white, black and Hispanic imbalance scores were -2.4%, 2.1%, and 1.2% when using only within district Census blocks to construct the neighborhood and were -1.1%, 1.8%, and 0.3% respectively, when using all blocks within 2 miles. Modest shifts as a result of ignoring district boundaries also appear for the Camden area (Camden and Burlington counties). In these areas of New Jersey the white, black and Hispanic imbalance scores were -2.9%, 4%, and -0.2% when using only within district Census blocks to construct the neighborhood and were -2.2%, 3.8%, and 0.4% respectively, when using all blocks within 2 miles.

TABLE B:	Camden.	NJ
	Cumucity	110

District ID	District Name	White Difference		Black Difference		Hispanic Difference	
		With district condition	Without district condition	With district condition	Without district condition	With district condition	Without district condition
3408340	Lawnside Borough	1%	-61%	-4%	64%	3%	2%
3406000	Gloucester City	2%	32%	1%	-20%	-2%	-11%
3403420	Collingswood Borough	-3%	25%	4%	-15%	-1%	-13%
3411940	Oaklyn Borough	0%	26%	0%	-17%	0%	-10%
3402370	Brooklawn Borough	-13%	5%	10%	-2%	3%	-3%
3410890	Mount Ephraim Borough	3%	20%	2%	-8%	-5%	-9%
3418270	Woodlynne Borough	-1%	-15%	-4%	-8%	6%	17%
3414040	Riverton	2%	16%	0%	-7%	2%	-2%
3401050	Audubon Borough	-1%	13%	1%	-3%	-1%	-6%
3406390	Haddonfield Borough	-1%	11%	0%	-4%	0%	-5%
3417430	West Deptford Township	-6%	5%	1%	-5%	3%	-1%
3406360	Haddon Township	0%	11%	0%	-4%	0%	-4%
3406330	Haddon Heights Borough	-3%	6%	5%	1%	-1%	-4%
3402640	Camden City	-1%	-9%	7%	12%	-3%	1%
3412870	Pennsauken Township	-12%	-20%	6%	10%	5%	7%
3403120	Cinnaminson Township	-4%	2%	3%	0%	1%	-1%
3401170	Barrington Borough	2%	7%	1%	-3%	0%	0%
3412390	Palmyra Borough	-7%	-12%	5%	10%	3%	3%
3409660	Maple Shade Township	-6%	-4%	4%	3%	5%	6%

3403000 Cherry Hill Township	-6%	-6%	1%	0%	2%	1%
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